

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--

**Question Paper Code: 35040**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Fifth Semester

Electrical and Electronics Engineering

01UEC523 – COMMUNICATION ENGINEERING

(Common to EIE and ICE)

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Define Carson's rule.
2. List two major limitations of amplitude modulation.
3. Define sampling theorem.
4. What is the main difference between DPCM and DM?
5. Define entropy.
6. When will entropy function have its maximum value?
7. Give the advantages of CDMA.
8. Define spread spectrum.
9. Tell about apogee and perigee.
10. What is SCADA?

PART - B (5 x 16 = 80 Marks)

11. (a) Explain the generation of FM signal using reactance modulator with neat diagram. (16)

Or

(b) Draw the block diagram for the generation and demodulation of a VSB signal and explain the principle of operation. (16)

12. (a) Explain in detail about FSK. (16)

Or

(b) List out the various pulse modulation schemes and explain PAM. (16)

13. (a) Encode the data 01001110 using NRZ, RZ, AMI coding. (16)

Or

(b) Briefly discuss on various error control codes with an example. (16)

14. (a) Discuss in detail about CDMA technique and mention its advantages and disadvantages. (16)

Or

(b) Explain in detail about time division multiple access. (16)

15. (a) Explain the block diagram of an optical fiber communication system. (16)

Or

(b) List and discuss the various orbits defined for satellite communication. (16)

---